

WINTER

EAA CHAPTER 25

MINNEAPOLIS / ST PAUL, MN

JANUARY 2012



Young Eagles 2011

by **Bill Brown**



2011 proved to be a most interesting year for our Young Eagles program. We were rained out six (6) times and still managed to fly 364 kids! Not bad! We did it by managing 9 Rally's during the year. You may wonder how we managed to fly 9 times and get rained out 6 times. What we did was to schedule "special" events for the kids that got rained out on the nor-

(Continued on page 4)

New Chapter 25 Scholarships

from **Pat Halligan**

EAA Chapter 25 members

For the past few years I've seen some wonderful things happen within our chapter. The Bert Sisler Aviation Education Center is now insulated, heated and paid for! Bill Brown and his crew have taken the Young Eagle

(Y.E.) program to a whole new level. We send a few kids to Oshkosh summer camp, each year, at almost no cost to the chapter, because of the Y.E. credits. We have a number of chapter members working weekly on building a Pietenpol aircraft.



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"Say Intentions"



-a message from Kim V. Johnson,
Chapter 25 President

I am honored that you have authorized me to a leadership position in this wonderful organization. The outgoing officers have been extremely gracious and helpful during the transition period we have been working in over the past 2 months. I am especially grateful to John Koser for the extra time he has taken to share his planning files and

documents with me as well as to bring me up to date on current topics. The outgoing and new officers are in almost daily communication regarding opportunities and ideas that come up. We have a good team of new officers who have already jumped in and begun work toward keeping Chapter 25 a thriving and vibrant organization. Thank goodness the Chapter has Kris Olson as Treasurer and Membership Coordinator. She knows everything about the Chapter and works relentlessly on the Chapter's finances, membership and Young Eagles activities. I have learned that I can rely on many Chapter members to answer questions and pitch in and help when needed. As one member told me during the Holiday party, "Chapter 25 has been rolling along so robustly for so long that I don't think you can screw it up." That statement of confidence removed all of my sense of fear and trepidation as we move ahead.

Most of the past Board members have agreed to continue serving. We have added one new Board member, Dick Navratil, and we are thrilled to have his knowledge of Chapter history and his airplane building expertise.

Speaking of the Holiday party, I was flabbergasted to learn that Chapter 25 members donated \$365 and 5 pounds of food to the 360 Communities food shelves and the MN Military Appreciation Fund. We have some very generous and giving souls in this Chapter. That is what happens when people are grateful for what they have. Thank you for your bigheartedness.

If you have been following the Chapter 25 Yahoo E-mail Groups, (if not, I hope you will subscribe by clicking on the "Subscribe to Ch. 25 E-mail Updates" on the Chapter 25 web site www.eaa25.org – it is our members means of communicating between meetings) there are two opportunities I would like to bring to your attention:

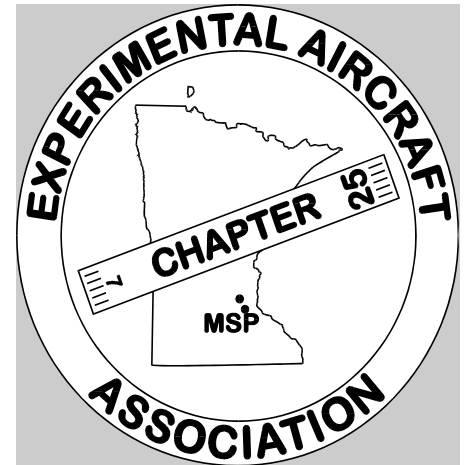
Friday, Jan. 20, 2012 – Premier showing of the movie, "Red Tails", a movie about the Tuskegee Airmen, at the Marcus Oakdale Cinema at 7:15 pm. The flight scenes look terrific. See message #1959 for more info.

Thursday, February 9, 2012 – Minnesota Aviation Day at the Capitol – An opportunity for the Minnesota aviation community to visit their State Senators and Representatives about the importance of aviation. A breakfast and lunch will be served. See message #1955 for more info.

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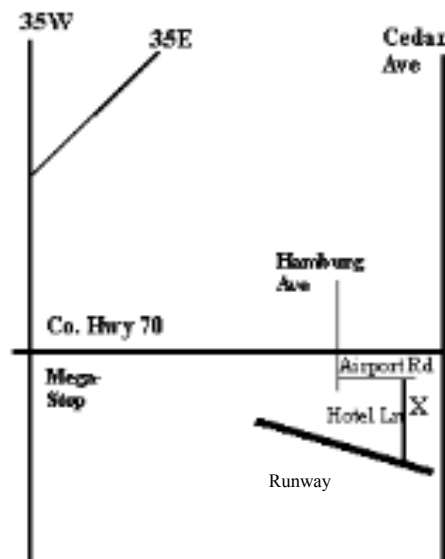
This Month: Wed Evening Jan 18th—BSAEC at Airlake

**Gather for chili at 6pm, Meeting starts at 7pm
Please bring a pot of chili or
crackers, cheese, desserts etc. to share!**

Program: Hiroshi Takeuchi and Keith Tschohl, pilots and techies connected with the Saturday morning Inflight Pilot Training Seminars will be presenting a seminar on the uses of an “iPad in the Cockpit”. Be sure to come and invite your friends.

Saturday, Jan 21st: A Chapter 25 Young Eagles event will be held from 9:00 am to 12:00 at the Airlake Airport. To RSVP or coordinate a group event, please contact our Young Eagle coordinator: **Bill Brown: 952-432-4231**

Directions to BSAEC (Chapter Hangar at Airlake): South on I-35 to Hwy 70 (Megastop), then East to Hamburg Ave (3rd stop sign.) Right turn and South to airport perimeter road. Left on airport perimeter road then right on Hotel or India Lane. If the surface is firm, please park on space between hangars.



EAA Chapter 25 Meeting Minutes November 16, 2011

Presiding Officer: John Koser

**Location: Bert Sisler Aviation Education Center
at Airlake Airport**

Business Meeting Discussions

The treasurer's report shows a cash balance of \$11,192 as of November 16.

Kris Olson reported on the following:

Annual membership renewal forms are available.
Please pick them up.

See Kris if you would like to order a permanent name tag.

Jim Riesinber has an RV6 for sale.

Hats are available for \$13.

Bill Brown gave a Young Eagles update. 75 kids are expected for the next rally on Saturday. Seven planes and a ground crew are lined up.

We are having trouble with the large hangar door. Thanks to Ron Hoyt for doing some initial repairs. We will get the door manufacturer to review the repairs and door hanging structure prior to use.

John proposed forming a hangar maintenance committee. Please contact an officer if you would like to volunteer.

This year's Holiday Party will be at Pat and Mary Hoyt's house on December 11. See directions in the newsletter. John proposed we use the occasion to collect funds for a local charity. Kim Johnson agreed to coordinate the effort.

The MAC has indicated that a gas line on/near the airport was recently broken during some excavation work. The line has been repaired. The gas company locked out all gas meters at hangars until they were confident that internal gas equipment was safely operational. Our furnace is now up and running.

Year end awards were distributed for Young Eagle participation, newsletter contributions, and AirVenture volunteering.

Kim indicated that he is trying to line up a presentation on cockpit use of the iPad for our January meeting.

Program

Steve Adkins gave some demonstrations on tools and metal forming methods he has used in building his Hummel Ul-tracruiser.

Lou Martin gave a presentation on flying warbirds for Planes of Fame.

Submitted by Craig Nelson

Final Approach Trivia Quiz from John Schmidt

Which Asian nation features a major passenger airport so underutilized that it sometimes features 23 staff members serving only 5 passengers?

Answer on page 5



Y.E. 2011

(From Page 1)

mally scheduled days. And 3 of the "special" days were rained out, too. All in all, nature was not very cooperative. But persistence always wins. Every time I was able to get a group of kids together to fly on an unscheduled Saturday, my request for volunteers was always answered. It's great having folks you can count on. My sincere thanks.

Several months stand out. Don Eide's daughter Jodi Hansen arranged for a large group from her Home School activities to fly in February. (Don flew 12 kids that day.)

Then in July we had a large group of Boy Scouts from the Latino community, and in August a large group of Scouts from the Asian community, all from the Twin Cities.

I still have a goal of 500 kids in one year. We came close in 2010, maybe the weather will cooperate in 2012 and that will be the year.

Bill Brown





Y.E. 2011 *(From Page 4)*



Thank You!

January 2012

Dear Chapter 25 Members,

Thank you for your generous donation of \$230.00 received on December 13, 2011 to support **360 Communities'** Food Shelf. Your commitment to sustainable change in our community means a more promising tomorrow for all of us.

Your support helps empower our neighbors to forge brighter futures. Your contribution will help families get back on the track to self-sustained success, help children reach their academic potential and keep women and children safe from domestic abuse.

Tomorrow is full of opportunity thanks to your positive action. We look forward to continuing our work together in 2012. Please visit our website at 360Communities.org to stay in touch.

And remember, you make more than 40 years of hope, change and success a reality!

Regards,

Laurie Rieb
Director of Development

Answer to Final Approach Quiz *(See page 3)*

Currently serving only a single destination on Uni Air to Taipei Songshan, Taiwan's Hengchun Airport - the southern-most airport on the island nation - has been somewhat doomed by its location. It regularly experiences Katabic wind, which forces the entire airport to close. As a result, the airport's load factor rarely exceeds 40%, and has been known to reach only 0.45% when there are 23 staff members to serve an average of 5 passengers. The airlines that do operate there are considering withdrawing their services.

Aircraft Engine Stress *by Pete Gavin*

Sometimes you see a photograph that just makes you ask “What is going on here?” John Koser took these with his cell phone and emailed them to me last fall, and I finally got around to calling Bill Brown to find out more.

In the photo on the right, Bill is running up his Sonex with the tail tied safely to his car. That is Ned Lebens under the towel, capturing vibrations data on a scope. It turns out that they were looking for vibration harmonics as Bill varied the engine rpms. They found no problems, but there is more to this story.

They were following up on a problem Bill had with his Jabiru 3300. The six bolts attaching the flywheel to the crankshaft had sheared upon startup, and Bill wanted to be sure that harmonic vibrations were not a contributing cause.

Jabiru has issued service bulletin JSB012-2 that explains all of this in more detail (see www.jabiru.net.au/Service%20Bulletins/Engine%20files/JSB012-2.pdf). While only 5 of 2000 engines have experienced this problem, it points out the stresses we put on the propeller, flywheel, and crankshaft during normal operation of an aircraft. The highest stress normally put on the flywheel bolts occurs when the starter engages the flywheel to start the engine. An even higher stress would occur in the event of a prop strike, but that was not the case here. But even in normal operation, these bolts are under stress with every change in engine speed, and indeed, even at every instance of combustion when the burst of energy from each cylinder is transferred to the crankshaft and thus to the bolts attaching the flywheel and propeller. So the service bulletin calls upon operators to check all attachments to ensure that the prop and flywheel remain securely attached with no possibility of excess vibration. The service bulletin also calls for the installation of three metal dowels to provide additional rigidity and strength to the flywheel attachment. Bill has completed this upgrade.

The citation below is from the Jabiru website. I would guess that this is at least partly in response to the problem Bill experienced.

“3.1 JSB012 Issue 2

Since Issue 1 of this bulletin was released in 2006 there have been very few incidences of damage to the flywheel attaching hardware. However in late 2010 there was an engine failure of a Jabiru 3300 engine caused by a failure



of the flywheel mounting screws. Due to this event Jabiru are revising the maintenance schedule of all engines to include a regular inspection of the flywheel screws.”



But something else in the photo grabbed my attention. Look at the close up of the running engine and prop in the photo to the lower right. I couldn’t believe the curvature in the running prop, and even more confusing to me was the apparent curvature of the prop back toward the engine. John Koser explained that this is an illusion resulting from the “rolling shutter” effect of his cell phone camera as it captured the image of the spinning prop. The tip of the prop at top was captured at the earliest point in time, with portions of the prop nearer the hub having moved to the right as they were captured. Assuming the shutter was moving down, the tip at the bottom was the last portion to be captured in the photo. John suggested that the prop has probably turned about 1/3 of a revolution throughout the movement of the shutter for this photo.

Thanks to Bill and John for answering my questions and helping out with this article!



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For Sale: Aviation Books. Oldies, classics, some brand-new, some autographed. Inexpensive! Cutting down my library. I can e-mail a listing. Noel Allard. nallard@unitelec.com.

For Sale: MAGNATEK Model HH2p011 1/4 HP compressor with spray gun and assortment of accessories. This equipment has been hardly used. Anyone into model airplanes or art would find this an asset. \$100 ONO Contact Peter Denny 763-529-5325 or email peterthepilot99@gmail.com

For Sale: Lancair 320/360 kit, Super-Fastbuild kit. Asking \$20,000 or offer. Call 608/797-5752.

“Say Intentions” (Continued from page 2)

Please feel welcome to come out and participate in our monthly Young Eagles event on Saturday, Jan. 21 (the 3rd Saturday of every month). If you know of any groups of kids, ages 8 -17, have their leaders contact Young Eagles Coordinator, Bill Brown. We have capacity for more kids this month. This is yet another way we give back to the community by giving kids an opportunity of flying in a small airplane. We flew 364 kids in 2011 and members posted 69 ground crew months.

We have an exciting presentation for the January 18 Chapter meeting. Hiroshi Takeuchi and Keith Tschohl, pilots and techies connected with the Saturday morning Inflight Pilot Training Seminars will be presenting a seminar on the uses of an “iPad in the Cockpit”. Be sure to come and invite your friends.

Looking forward to an exciting year! See you at the meeting!

—Kim



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Chapter Events

Jan 18th Chapter Mtg at BSAEC, 6 pm
(see page 3 for map & directions)

Jan 21st Young Eagles start at 9am-
Contact Bill Brown to volunteer

Future meetings 2/15, 3/21, 4/18, 5/16,
6/20, 7/18, 8/15, 9/19, 10/17, 11/21, 1/16



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New Chapter 25 Scholarships

(Continued from page 1)

But, the one program that has not gotten off the ground, is our aviation scholarships. It has been kind of a hit or miss event for the past few years. A few months ago I contacted the University of North Dakota (UND) and started asking a few questions about how our chapter could set up an annual scholarship for \$500 or \$1000, within their aviation program. They were very excited and Josh Christianson gave me a number of ideas to think about.

What has developed is two new and exciting scholarships that chapter 25 can be very proud of. The first one is all set up and will be called the Mark and Linda Gulbrandson / EAA Chapter 25 Scholarship. The second one still has some paperwork to finish and it will be known as the Ken Dahlberg / EAA Chapter 25 Scholarship. UND will pick a freshman or sophomore aviation student, each spring, for each scholarship. Each annual scholarship will be for \$2000.00 Chapter 25 is responsible for one half of each scholarship.

Chapter 25 is a 501.C.3 corporation and we need to pass along some of the money we take in each year, to keep our status. This will not only help us with that requirement, but more importantly, help us promote general aviation at one of the most prestigious aviation colleges in the country. Yes, I graduated from UND in the early days. As a matter of fact, I had a 4.0 gpa when I left Grand Forks. I had a 1.0 gpa - four years in a row!!

Every chapter member can be proud of these scholarships, because you helped fund them, one way or another. By being a member and paying dues, or buying or selling a raffle ticket, you helped out. Flying a young eagle and getting us credits, helped us save money on summer camps. Volunteering your time and labor at the hangar saved us money that we would have had to pay to someone, for those services. By bringing a friend to our meetings who became a member, you helped out. By giving a donation for keeping your airplane in the chapter hangar. Even our newsletter sponsors help out.

Thank you for all you do, and congratulations on the scholarships!

—Pat Halligan



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President

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